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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,576	11/01/2000	Fukuharu Sudo	450101-02387	9090

20999 7590 03/26/2003

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EXAMINER
HAN, QI

ART UNIT	PAPER NUMBER
2654	

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/674,576	SUDO ET AL.	
	Examiner	Art Unit	
	Qi Han	2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-12 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-12 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

2. Claims 4-5 are objected to because of the following informalities:

Regarding claim 4, the limitation of "wherein said contents selection information preparation means calculates the similarity between said speech information in **an** acoustic characteristic quantities and each said preparation information memorized in said prepared information storage means; if the number of contents corresponding to the preparation information **the** calculated value of similarity for which has exceeded a pre-set threshold value is not less than a pre-set number, said contents selection information preparation means acquires **the** speech information different from the first-stated speech information to repeat the similarity calculate on thereon; **and wherein** if the number of contents corresponding to the preparation information the calculated value of similarity for which has exceeded a pre-set threshold value is less than said pre-set number, said contents selection information preparation means prepares the contents selection information for said contents corresponding to said preparation information the similarity value for which has exceeded said pre-set threshold value" are unclear; and the grammar also appears incorrect. Appropriate correction is required.

Regarding claim 5, the limitation of "wherein said contents selection information preparation means calculates the similarity between said speech information in **an** acoustic

characteristic quantities and each said preparation information memorized in said prepared information storage means; if the number of contents corresponding to the preparation information the calculated value of similarity for which has exceeded a pre-set threshold value is not less than a pre-set number, said contents selection information preparation means calculates variations from one category to another of said preparation information to prepare the contents selection information based on the preparation information of the category having the maximum variations; and wherein if the number of contents corresponding to the preparation information the calculated value of similarity for which has exceeded a pre-set threshold value is less than a pre-set number, said contents selection information preparation means prepares the contents selection information on said contents corresponding to said preparation information the calculated value of similarity for which has exceeded said pre-set threshold value" are unclear and the grammar also appears incorrect. Appropriate correction is required.

Claim Rejections - 35 USC § 102

Rejection under 35 U.S.C. 102(e), Patent Application Publication or Patent to Another with Earlier Filing Date, in view of American Investors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application of patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 4-5, 8-10 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Logan et al. (USPN 5,732,216) hereinafter referenced as Logan.

Regarding **claim 1**, Logan discloses an audio message exchange system that comprises a host system organizing and transmitting program segments to client subscriber locations via Internet (abstract, and see Fig. 1), which corresponds to the claimed "a contents selection system in which a server transmits the contents selection information for having a client select the contents through a network." Logan further discloses that:

a. the subscriber audio player (herein equivalent to the client) may be implemented by a conventional laptop or desktop personal computer including a processor (the client CPU 105 in Fig. 1), and a data storage system consisting of both high speed RAM storage and a persistent mass storage device, such as a magnetic disk memory, the data storage system being used for storing audio, text and image data at 107 (Fig. 1) and for storing usage data at 109 which records the nature of the programming reproduced by the player 103, a sound card 110 which receives audio input from a microphone input device 111 for accepting voice dictation and commands from a user and which delivers audio output to a speaker 113 in order to supply audio information to the user (column 3, lines 24-36), a conventional high speed data modem 115 for receiving (downloading) the program information 107 from the remote server 101 and for transmitting (uploading) program selections and preferences as well as usage data in the file 109 to the server 101 via data communication link 117 to the Internet (column 4, lines 26-34), which corresponds to the claimed "said client has input information transmitting means for transmitting the input speech information through said network to said server and outputting means for

receiving the contents selection information from said server through said network and for outputting the received contents selection information;" and

b. the host file server 101 (Fig.1) stores and maintains a plurality of data files including a program data library indicated generally at 130 consisting of a collection of compressed audio program segments 131, announcement segments 132, text program segments 133, image segments 134, advertising segments 135 and program catalog information 137 (column 4, lines 46-52); provides the segments program for segmenting and indexing audio voice, music files or other contents (column 4, lines 53-54, and column 36, lines 1-5), in which a program catalog identifies recorded programs that relate to a group of the topics so that subscriber can select the program from the catalog (column 2, lines 51-54) (which basically provides a preparation function for content selection information and is equivalent interpreted as "contents selection information preparation means"); and further provides FTP server interface 125, CGI interface 127, and HTML interface for HTTP protocol (column 4, lines 44-46) for transferring data to client and receiving requests from client (column 4, line 41 and column 5, line 47). This corresponds to the claimed "said server including prepared information storage means for storing one or more pieces of the preparation information pertinent to each contents, from one contents to another, contents selection information preparation means for preparing said contents selection information based on the speech information received from said client through said network and on said preparation information and contents selection information transmitting means for transmitting said contents selection information prepared by said contents selection information preparation means to said client over said network."

Regarding **claim 2**, Logan discloses everything claimed, as applied above (see claim 1). Logan further discloses that the play mechanism 103 (client) includes a microphone for accepting voice commands (column 12, lines 53-54), for example, the spoken voice command "Five" can indicate a request to go to a predetermined numbered program segment while the spoken command "NEWS" could switch to the subject announcement segment for news programs (column 13, lines 25-27), and suggests that the system may includes a voice recognition system for the bookmark program segments (column 15, lines 38-39). In addition, Logan discloses a preferred procedure for preparing the program content which is distributed to subscribers in Fig. 6 (column 13, lines 5-6), in which the program content is structured to facilitate interactive program selection by dividing data into segments (topics), indexing content, preparing transcript, comparing indexed data and identifying the program potentially relevant to one or more of the subject matter categories offered to subscribers (column 35, line 58 through column 36, line 21). This corresponds to the claimed "said client includes speech recognition means for performing speech recognition on said speech information input to said input information transmitting means; wherein said input information transmitting means transmitting the recognized speech information processed with speech recognition by said speech recognition means to said server; and wherein said contents selection information preparation means preparing said contents selection information based on said recognized speech information and on said preparation information received from said client."

Regarding **claim 4**, as best understood in view of objection stated above, Logan discloses everything claimed, as applied above (see claim 1). Logan further discloses multiple database for managing various data (column 4, lines 59-67) and information structure for processing

program table having program segment record with group ID and request table having program ID (column 16, lines 66-67 and column 17, line 43 to column 18, line 16), which suggests that the system can inherently control the total number of programs, a group of programs or individual program. Furthermore, Logan discloses that the subject and topic program segments provide a hierarchical catalog listing which provides the descriptive information about the associated content segments which enables the subscriber to make informed selections (column 18, lines 30-34). Moreover, Logan discloses multiple evaluations in levels, such as interest level (column 9, line 48), cost level (column 11, line 30), and important level (column 19, line 60), for further managing amount of contents, which has equivalent function to the claimed "a number of contents corresponding to the preparation information". In addition, Logan discloses that the comparison function at 407 (Fig. 6) scans the words in each candidate program segments to form a weighting value (herein equivalent to "the calculated value of similarity") indicating the frequency (density) of the occurrence of descriptors for each category; program segments whose content produces a high weighting value with respect to any category are automatically associated with that category and retained for further processing as indicated at 408, while program segments producing no weighting values greater than a predetermined minimum may be completely discarded at this stage, as indicated at 411, since their content does not indicate a sufficient likelihood of being of interest to a sufficient number of subscribers" (column 36, lines 22-34), which suggests a equivalent similarity measure for selecting contents as the claimed. This corresponds to the limitation of the claimed.

Regarding **claim 5**, as best understood in view of objection stated above, Logan discloses everything claimed, as applied above (see claim 1). Logan further discloses multiple database

for managing various data (column 4, lines 59-67) and information structure for processing program table having program segment record with group ID and request table having program ID (column 16, lines 66-67 and column 17, line 43 to column 18, line 16), which suggests that the system can inherently control the total number of programs, a group of programs or individual program. Furthermore, Logan discloses that the subject and topic program segments provide a hierarchical catalog listing which provides the descriptive information about the associated content segments which enables the subscriber to make informed selections (column 18, lines 30-34). Moreover, Logan discloses multiple evaluations in levels, such as interest level (column 9, line 48), cost level (column 11, line 30), and important level (column 19, line 60), for further managing amount of contents, which has equivalent function to the claimed "a number of contents corresponding to the preparation information". In addition, Logan discloses that the comparison function at 407 (Fig. 6) scans the words in each candidate program segments to form a weighting value (herein equivalent to "the calculated value of similarity") indicating the frequency (density) of the occurrence of descriptors for each category; program segments whose content produces a high weighting value (herein inherently suggests that this content highly likely belongs to a category, which is equivalent to high variation comparing the other categories) with respect to any category are automatically associated with that category and retained for further processing as indicated at 408, while program segments producing no weighting values greater than a predetermined minimum may be completely discarded at this stage, as indicated at 411, since their content does not indicate a sufficient likelihood of being of interest to a sufficient number of subscribers" (column 36, lines 22-34), which suggests a

equivalent similarity measure for selecting contents as the claimed. This corresponds to the limitation of the claimed.

Regarding **claim 8**, Logan discloses an audio message exchange system that comprises a host system organizing and transmitting program segments to client subscriber locations via Internet (abstract, and Fig. 1). Logan further discloses that the subscriber audio player (herein equivalent to the client) may be implemented by a conventional laptop or desktop personal computer including a processor (the client CPU 105 in Fig.1), and a data storage system consisting of both high speed RAM storage and a persistent mass storage device, such as a magnetic disk memory, the data storage system being used for storing audio, text and image data at 107 (Fig.1) and for storing usage data at 109 which records the nature of the programming reproduced by the player 103, a sound card 110 which receives audio input from a microphone input device 111 for accepting voice dictation and commands from a user and which delivers audio output to a speaker 113 in order to supply audio information to the user (column 3, lines 24-36), a conventional high speed data modem 115 for receiving (downloading) the program information 107 from the remote server 101 and for transmitting (uploading) program selections and preferences as well as usage data in the file 109 to the server 101 via data communication link 117 to the Internet (column 4, lines 26-34), which corresponds to the claimed "input information transmitting means for transmitting the input speech information over said network to said server; and outputting means for receiving said contents selection information from said server over said network to output the received contents selection information."

Regarding **claim 9**, Logan discloses everything claimed, as applied above (see claim 8). Logan further discloses that the play mechanism 103 (client) includes a microphone for

accepting voice commands (column 12, lines 53-54), for example, the spoken voice command "Five" can indicate a request to go to a predetermined numbered program segment while the spoken command "NEWS" could switch to the subject announcement segment for news programs (column 13, lines 25-27), and suggests that the system may includes a voice recognition system for the bookmark program segments (column 15, lines 38-39). In addition, Logan discloses a preferred procedure for preparing the program content which is distributed to subscribers in Fig. 6 (column 13, lines 5-6), in which the program content is structured to facilitate interactive program selection by dividing data into segments (topics), indexing content, preparing transcript, comparing indexed data and identifying the program potentially relevant to one or more of the subject matter categories offered to subscribers (column 35, line 58 through column 36, line 21). This corresponds to the claimed "said input information transmitting means includes speech recognition means for performing speech recognition on the input speech information and wherein the recognized speech information, processed with speech recognition by said speech recognition means, is transmitted to said server."

Regarding **claim 10**, Logan discloses an audio message exchange system that comprises a host system organizing and transmitting program segments to client subscriber locations via Internet (abstract, and Fig. 1). Logan further discloses that the host file server 101 (Fig.1) stores and maintains a plurality of data files including a program data library indicated generally at 130 consisting of a collection of compressed audio program segments 131, announcement segments 132, text program segments 133, image segments 134, advertising segments 135 and program catalog information 137 (column 4, lines 46-52); provides the segments program for segmenting and indexing audio voice, music files or other contents (column 4, lines 53-54, and column 36,

lines 1-5), in which a program catalog identifies recorded programs that relate to a group of the topics so that subscriber can select the program from the catalog (column 2, lines 51-54), which basically provides a preparation function for content selection information so is interpreted as "contents selection information preparation means" ; and further provides FTP server interface 125, CGI interface 127, and HTML interface for HTTP protocol (column 4, lines 44-46) for transferring data to client and receiving a request from client (column 4, line 41 and column 5, line 47). This corresponds to the claimed "a contents selection server comprising: prepared information storage means for memorizing one or more pieces of the information on each contents, from one contents to another; contents selection information preparation means for preparing the contents selection information for selecting said contents based on the speech information received from a client over a network and said preparation information; and contents selection information transmitting means for transmitting said contents selection information prepared by said contents selection information preparation means to said client over said network."

Regarding **claim 12**, it discloses a method, which corresponds to the apparatus of claim 1; the method is inherent in that it simply provides functionality for the structure found in claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of Hedin et al. (USPN 6,185,535) hereinafter referenced Hedin.

Regarding **claim 3**, Logan discloses everything claimed, as applied above (see claim 1). Logan further discloses a preferred procedure for preparing the program content which is distributed to subscribers in Fig. 6 (column 13, lines 5-6), in which the program content is structured to facilitate interactive program selection by dividing data into segments (topics), indexing content, preparing transcript, comparing indexed data and identifying the program potentially relevant to one or more of the subject matter categories offered to subscribers (column 35, line 58 through column 36, line 21); and a text transcript may be prepared using conventional speech recognition mechanisms and the transcript may then be indexed by the terms used (column 36, lines 6-9), which corresponds to the claimed "said server includes speech recognition means for recognizing the speech of said speech information;" and "said contents selection information preparation means prepares said contents selection information based on the speech information recognized by said speech recognition means and said preparation information." But, herein, Logan's speech recognition is for audio programming (content), not for speech information "received from said client over the network" as the claimed. However, the examiner contends that the concept of providing speech recognition for recognizing a speech from client was well known, as taught by Hedin.

In the same field of endeavor, Hedin discloses voice control of a user interface to service applications. Hedin further discloses that the remote application part (server) 205 (Fig. 3) comprises an ASR (automatic speech recognition) being able to recognize isolate or continuous speech from the terminal application part (client) (column 9, lines 12-37).

Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Logan by specifically providing an ASR for recognizing a speech information from client, as taught by Hedin, for the purpose of taking advantage of powerful speech recognizer in a server.

Regarding **claim 11**, Logan discloses everything claimed, as applied above (see claim 10). In addition, the rejection is based on the same reason as the claim 3, because it is obvious in that it simply provides the same structure and functionality found in claim 3.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of Ladd et al. (USPN 6,493,671) hereinafter referenced Ladd.

Regarding **claim 6**, Logan discloses everything claimed, as applied above (see claim 2). But, Logan fails to expressly disclose a verifying mechanism for speech recognition as claimed. However, the examiner contends that the concept of providing a verifying mechanism for speech recognition was well known, as taught by Ladd.

In the same field of endeavor, Ladd discloses a markup language for interactive service to notify a user of an event and methods thereof, comprising a voice browser 250 (Fig. 3) (column 7, line 6) and an automatic speech recognition (ASR) unit 254, 12-37). Ladd further disclose that the "DIALOG" element and the associated "STEP" element of a markup language define a dialogue interpretation between the voice browser and user, including "confirm" element (column 18, lines 1-39) for allowing user verifying the spoken content.

Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Logan by specifically providing a verifying mechanism for speech recognition, as taught by Ladd, for the purpose of increasing speech recognition accuracy.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of Hedin and further in view of Ladd.

Regarding **claim 7**, Logan and Hedin disclose everything claimed, as applied above (see claim 3). But, Logan and Hedin fail to expressly disclose a verifying mechanism for speech recognition as claimed. However, the examiner contends that the concept of providing a verifying mechanism for speech recognition was well known, as taught by Ladd.

In the same field of endeavor, Ladd discloses a markup language for interactive service to notify a user of an event and methods thereof, comprising a voice browser 250 (Fig. 3) (column 7, line 6) and an automatic speech recognition (ASR) unit 254, 12-37). Ladd further disclose that the "DIALOG" element and the associated "STEP" element of a markup language define a dialogue interpretation between the voice browser and user, including "confirm" element (column 18, lines 1-39) for allowing user verifying the spoken content.

Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Logan by specifically providing a verifying mechanism for speech recognition, as taught by Ladd, for the purpose of increasing speech recognition accuracy.

Conclusion

7. Any response to this office action should be mailed to:
Commissioner of Patents and Trademarks, Washington D.C. 20231
or faxed to:
(703)-872-9314
Hand-delivered responses should be brought to:
Crystal Park II, 2121 Crystal Drive, Arlington. VA. Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qi Han whose telephone numbers is (703) 305-5631. The examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:30 p.m. and Friday from 8:00 a.m. to 12:00 a.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold, can be reached on (703) 305-4379.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Marsha D Banks-Harold

QH/qh
September 4, 2002

MARSHA D. BANKS-HAROLD
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